

REMARKS

By the foregoing Amendment, Claim 1 has been amended, and Claims 2, 4-6, 8, 11-12, and 25-38 have been cancelled. Favorable reconsideration of the application is respectfully requested.

The Examiner objected to the drawings as not showing the features of Claims 2, 4, 5, 6 and 11, and required corrected drawings to show these features or the cancellation of those claims. Claims 2, 4, 5, 6 and 11 have been cancelled, so that it is believed that the objection to the drawings can be withdrawn.

The Examiner objected to the specification as not providing proper antecedent basis for the subject matter of Claim 14, which recites "wherein each of said helical windings comprise a series of 6 alternating zigzag bends in a rotation of the wire." The Examiner's attention is directed to Figs. 3 and 4 and the specification at page 10, lines 13-15, which states "in one configuration of the stent, the frame is formed from at least one piece of wire configured as a series of helical windings consisting of a series of six alternating zigzag bends." It is therefore respectfully submitted that the objection to the specification should be withdrawn.

The Examiner also objected to Claims 4 and 8, which have been cancelled.

Claims 1-17 and 23 were rejected under 35 U.S.C. §102(b) on the grounds of anticipation by Martin et al., which discloses a stent-graft 2 including a graft member 4, a stent member 6, and a coupling member 8 for coupling the stent and graft members together. The stent member 6 is generally cylindrical and includes a helically arranged undulating member 10 having a plurality of helical turns 12 aligned so that they are "in-

phase" with each other. The apex portions 16 are aligned with adjacent base portions 18 with a linking member 20 laced through the adjacent apex portions and base portions 18, and the stent member does not have alternating chevron and reverse chevron configurations. In contrast, as is recited in amended Claim 1, the present invention provides for an intravascular flow modifier and reinforcement device having "a generally cylindrical frame consisting of a single elongate resilient wire configured as a series of helical windings, each of said helical windings including a series of between 4 and 8 alternating zigzag bends in a rotation of the wire," and "said generally cylindrical frame in its deployed configuration having a helical pattern of sharp alternating zigzag bends aligned to have a chevron configuration when viewed from a first direction transverse to the longitudinal axis, and a reverse chevron configuration when viewed from a second direction transverse to the longitudinal axis."

Claim 1 has been amended to include the subject matter of Claim 12; and support for the recitation of the chevron and reverse chevron configurations can be found in the specification at page 10, lines 8-11. In Martin et al., an apex of a helical loop is adjacent to a base portion of an adjacent helical loop, both being wrapped around the common linking member 20, whereas in the present invention, the apices and base portions of the alternating zigzag bends of adjacent helical loops are not adjacent to each other. Rather, in the present invention, apices are adjacent to apices of adjacent helical loops, and base portions are adjacent to base portions of adjacent helical loops, to form the chevron and reverse chevron configurations which are recited in Claim 1. It is therefore respectfully

submitted that Claim 1 patentably distinguishes Martin et al., and that the rejection of Claims 1-17 and 23 on the grounds of anticipation by Martin et al. should be withdrawn.

Claims 1-3, 6-10, 12-17 and 23 were rejected under 35 U.S.C. §102(b) on the grounds of anticipation by Das, disclosing a stent with a winding 10 having curves 22 each having a peak 24 and a valley 26, with peaks generally oriented in the same direction. The peaks 24 are aligned with adjacent valleys 26 of adjacent curves 22, and the stent does not have alternating chevron and reverse chevron configurations. In contrast, as is recited in amended Claim 1, the present invention provides for an intravascular flow modifier and reinforcement device having "a generally cylindrical frame consisting of a single elongate resilient wire configured as a series of helical windings, each of said helical windings including a series of between 4 and 8 alternating zigzag bends in a rotation of the wire," and "said generally cylindrical frame in its deployed configuration having a helical pattern of sharp alternating zigzag bends aligned to have a chevron configuration when viewed from a first direction transverse to the longitudinal axis, and a reverse chevron configuration when viewed from a second direction transverse to the longitudinal axis." In Das, a peak 24 of a curve 22 is adjacent to a valley 26 of an adjacent curve, whereas in the present invention, the peaks and valleys of the alternating zigzag bends of adjacent helical loops are not adjacent to each other. Rather, in the present invention, peaks are adjacent to peaks of adjacent helical loops, and valleys are adjacent to valleys of adjacent helical loops, to form the chevron and reverse chevron configurations which are recited in Claim 1. It is therefore respectfully submitted that Claim 1 patentably distinguishes Das, and that the rejection of

Claims 1-3, 6-10, 12-17 and 23 on the grounds of anticipation by Das should be withdrawn.

Claims 1-17 and 23 were rejected under 35 U.S.C. §102(b) on the grounds of anticipation by Wiktor, which discloses a stent 20 formed of a winding wire 24 having zig-zags 30 attached to a longitudinal wire 32 at points 34 to prevent the stent from expanding along the longitudinal axis of the wire 32. Apex portions are aligned with adjacent base portions, with the longitudinal wire 32 maintaining the alignment and spacing between adjacent loops of the stent, and the stent member does not have alternating chevron and reverse chevron configurations. In contrast, as is recited in amended Claim 1, the present invention provides for an intravascular flow modifier and reinforcement device having "a generally cylindrical frame consisting of a single elongate resilient wire configured as a series of helical windings, each of said helical windings including a series of between 4 and 8 alternating zigzag bends in a rotation of the wire," and "said generally cylindrical frame in its deployed configuration having a helical pattern of sharp alternating zigzag bends aligned to have a chevron configuration when viewed from a first direction transverse to the longitudinal axis, and a reverse chevron configuration when viewed from a second direction transverse to the longitudinal axis." In Wiktor, an apex of a helical loop is adjacent to a base portion of an adjacent helical loop, with the loops of zig-zags being connected and spaced by the longitudinal wire, whereas in the present invention, the apices and base portions of the alternating zigzag bends of adjacent helical loops are not adjacent to each other. Rather, in the present invention, apices are adjacent to apices of adjacent helical loops, and base portions are

adjacent to base portions of adjacent helical loops, to form the chevron and reverse chevron configurations which are recited in Claim 1. It is therefore respectfully submitted that Claim 1 patentably distinguishes Wiktor, and that the rejection of Claims 1-17 and 23 on the grounds of anticipation by Wiktor should be withdrawn.

Claims 21 and 22 were rejected under 35 U.S.C. §103(a) on the grounds of obviousness from Martin et al. in view of Ferrera, or alternatively from Wiktor in view of Ferrera, or alternatively from Das in view of Ferrera. Ferrera was cited as disclosing a micro-strand cable. It is respectfully submitted that the combinations of Martin et al. and Ferrera, or alternatively Wiktor and Ferrera, or alternatively Das and Ferrera, are patentably distinguished by Claim 1, by the chevron and reverse chevron configurations which are recited in Claim 1, as discussed above. Claims 21 and 22 depend from Claim 1, so that it is respectfully submitted that Claims 21 and 22 are patentably distinguished from the combinations of Martin et al. and Ferrera, or alternatively Wiktor and Ferrera, or alternatively Das and Ferrera, and that the rejections of Claims 21 and 22 on the grounds of obviousness from Martin et al. in view of Ferrera, or alternatively from Wiktor in view of Ferrera, or alternatively from Das in view of Ferrera, should be withdrawn.

Claims 18 and 19 were rejected under 35 U.S.C. §103(a) on the grounds of obviousness from Martin et al. in view of Steinke, or alternatively from Wiktor in view of Steinke, or alternatively from Das in view of Steinke, which was cited as disclosing coating stent with a corrosion resistant material such as Parylene. Steinke, U.S. Patent No. 6,224,626, was incorrectly cited by the Examiner as U.S. Patent No. 6,244,626. It is respectfully submitted that the combinations of Martin et al. and Steinke, or alternatively

Wiktor and Steinke, or alternatively Das and Steinke, are patentably distinguished by Claim 1, by the chevron and reverse chevron configurations which are recited in Claim 1, as discussed above. Claims 18 and 19 depend from Claim 1, so that it is respectfully submitted that Claims 18 and 19 are patentably distinguished from the combinations of Martin et al. and Steinke, or alternatively Wiktor and Steinke, or alternatively Das and Steinke, and that the rejections of Claims 18 and 19 on the grounds of obviousness from Martin et al. in view of Steinke, or alternatively from Wiktor in view of Steinke, or alternatively from Das in view of Steinke, should be withdrawn.

Claim 20 was rejected under 35 U.S.C. §103(a) on the grounds of obviousness from Martin et al. in view of Andreacchi, or alternatively from Wiktor in view of Andreacchi, or alternatively from Das in view of Andreacchi. Andreacchi was cited as disclosing a stent that is electropolished. It is respectfully submitted that the combinations of Martin et al. and Andreacchi, or alternatively Wiktor and Andreacchi, or alternatively Das and Andreacchi, are patentably distinguished by Claim 1, by the chevron and reverse chevron configurations which are recited in Claim 1, as discussed above. Claim 20 depends from Claim 1, so that it is respectfully submitted that Claim 20 is patentably distinguished from the combinations of Martin et al. and Andreacchi, or alternatively Wiktor and Andreacchi, or alternatively Das and Andreacchi, and that the rejections of Claim 20 on the grounds of obviousness from Martin et al. in view of Andreacchi, or alternatively from Wiktor in view of Andreacchi, or alternatively from Das in view of Andreacchi, should be withdrawn.

Claim 24 was rejected under 35 U.S.C. §103(a) on the grounds of obviousness from Wiktor, or alternatively from Das, each of which was cited as not disclosing how the product was made. The Examiner indicated that the product disclosed by Wiktor and Das would be the same as that claimed. However, Claim 24 depends from Claim 1, and it is respectfully submitted that Wiktor and Das, are patentably distinguished by Claim 1, by the chevron and reverse chevron configurations which are recited in Claim 1, as discussed above. It is respectfully submitted that Claim 24 is patentably distinguished from Wiktor, or alternatively Das, and that the rejections of Claim 24 on the grounds of obviousness from Wiktor, or alternatively Das, should be withdrawn.

In light of the foregoing remarks, an early favorable consideration of the application on the merits is respectfully requested.

Respectfully submitted,

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